JUN 1 4 1993

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June 14, 1993

Ms. Donna Searcy Secretary Federal Communications Commission 1919 M Street, N.W., Room 222 Washington, D.C. 20554

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TOKYO

BEIJING GUANGZHOU HONG KONG

Re: Amendment of Part 74 of the Commission's Rules and Regulations in Regard to the Instructional Television Fixed Service, The Board of Education of the Township of Union, MM Docket No. 93-106

Dear Ms. Searcy:

EUROPE

MIDDLE EAST

BARCELONA BERLIN BRUSSELS

BUDAPEST CAIRO FRANKFURT

GENEVA

KIEV LONDON

MADRID

MILAN MOSCOW PARIS RIYADH

ZURICH

ST PETERSBURG STOCKHOLM WARSAW

Enclosed, on behalf of the Board of Education of the Township of Union, are an original and nine (9) copies (one for each Commissioner) of Comments in the above-referenced rulemaking.

Please let me know if you have any questions about these comments.

Sincerely,

Ernest T. Sanchez

Counsel for

The Board of Education of the

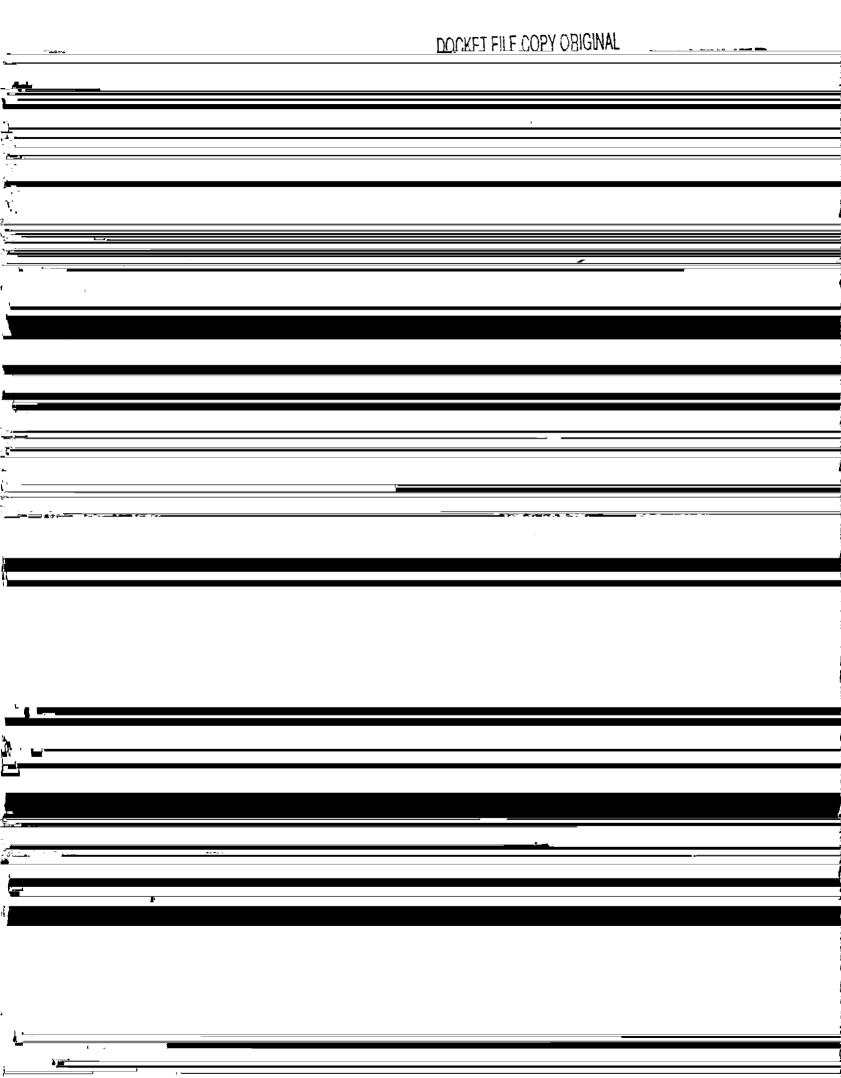
Township of Union

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Enclosures

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determined that this issue would be best addressed by reviewing the underlying rules. Therefore, the Commission initiated a rule-making proceeding, releasing its Notice of Proposed Rule Making April 23, 1993.

In this Notice, the Commission proposed to authorize ITFS applicants to seek up to four channels where they propose a minimum average of 20 hours of use per channel per week, regardless of the distribution of that use; i.e., the Commission proposed to permit the use of channel loading by ITFS licensees, allowing licensees to transmit all required programming on one channel for receipt on that channel. The Commission acknowledged that, when it authorized channel mapping in 1991,² it had also implicitly authorized the diversion of all instructional programming to one channel. They saw no reason for "the reality of the use of the channels to be different from their appearance" and, therefore, proposed to allow the less costly alternative of channel loading. The Commission felt this change should be authorized on a temporary basis because

² The Commission authorized the use of channel mapping in <u>Order on Reconsideration</u>, 6 F.C.C. Rcd 6764 (1991).

³ Joint Comments of the ITFS Parties submitted in response to the Commission's July 23, 1992 Public Notice.

⁴. According to the Wireless Cable Association International, Inc. (WCA), large wireless cable systems have reported costs of approximately \$115,00 for the channel mapping switch, \$100,000 for time base correction equipment, and recurring costs of up to \$700 per month for increased space, power and environmental controls associated with the switching equipment. Comments of the WCA submitted in response to the Commission's July 23, 1992 <u>Public Notice</u>. Channel mapping has thus proven to be both costly and burdensome for wireless cable operators, prohibiting most operators from implementing such technology.

of the increasing technology in the medium, specifically the development of digital compression, which could radically change the wireless cable industry and perhaps alleviate the need for channel mapping or channel loading altogether.

The major question the Commission raised was whether or not this proposed change can be effectuated while still preserving the primary purpose of ITFS as an educational medium. The Commission asked the public to comment whether the proposed rule change effectively balanced the educational purpose of ITFS with the costs of financing ITFS facilities, the utilization of the ITFS spectrum and the growth of the wireless cable industry.

II. BACKGROUND

A. The Board of Education of the Township of Union

The Board of Education of the Township of Union has been licensed by the Commission to operate an ITFS system serving the New York City Metropolitan area on Channel C1 since September 1, 1971 (BLIF-148). That license has allowed the Board of Education

school district consortium in the New York/New Jersey metropolitan area.

The Board of Education's time period, 8 A.M. to 4 P.M. weekdays, permits it to deliver original programming and to retransmit other educational programming to districts where it would otherwise be unavailable. High level Advanced Placement courses such as Physics, Chemistry, Calculus and Computer Science, produced by the New Jersey Institute of Technology, are transmitted from the Board of Education's studios to its transmitter atop the Empire State Building and from there to consortium member districts. Two-way audio permits interaction between students and professors.

The revenue received from Microband Wireless Cable for lease of excess time also enables the Board of Education to maintain a broadcast level facility at Union High and to offer to 75 students on an annual basis a Communication Arts and Sciences curriculum that has been recognized nationally, one from which students are able to immediately enter the television industry. Costs for salaries and staff, equipment and maintenance of the facility are offset by the revenue received from the lease of excess time to Microband.

B. The Development of ITFS

When it established ITFS in 1963, the FCC stated that the most important function of the new service was the transmission of instructional material to accredited public and private schools, colleges and universities for the education of students. Educational Television, 39 F.C.C. 846, 852-853 (1963), recon. denied, 39 F.C.C. 873 (1964). Emphasizing this commitment to education, the Commission set aside twenty-eight channels exclusively for educational use in 1971. Second Report and Order, 30 F.C.C. 2d 197 (1971).

For the past thirty years, the Commission has remained committed to this primary purpose of ITFS. At the same time, however, the Commission has recognized that the development of the wireless cable industry, coupled with increasing technology in the medium, has necessitated changes in its Rules governing ITFS. The Commission has, therefore, attempted to strike a balance between the educational purpose of ITFS, on the one hand, and the development of the wireless cable industry and the full-utilization of the ITFS spectrum on the other. Though the Commission has recognized the public policy interest in the changes it has made to the ITFS Rules to encompass these developments in technology and the wireless cable industry, it has also always emphasized the primary purpose of ITFS as an educational medium, seeing these changes as ancillary to the development of the spectrum.

For example, in 1984, the Commission responded to the underutilization of the spectrum by educational institutions by reallocating eight of the twenty-eight reserved channels to the wireless cable industry. <u>Instructional TV Fixed Service - Report and Order in Gen. Docket No. 80-112 (Report and Order)</u>, 94 F.C.C. 2d 1203 (1983), <u>recon. denied</u>, 98 F.C.C. 2d 129 (1984). In its <u>Report and Order</u>, however, the Commission emphasized its commitment to the primary purpose of ITFS stating,

"We continue to believe that the concept of a spectrum reservation for educational and other public service entities is valid. We also recognize...that the nature of educational institutions is such that it would take them much longer than it would take a commercial entity to begin using a new technology such as ITFS.... [W]e continue to believe it is in the public interest to have a spectrum reserved for ITFS."

<u>Id.</u> at 1224-1225.

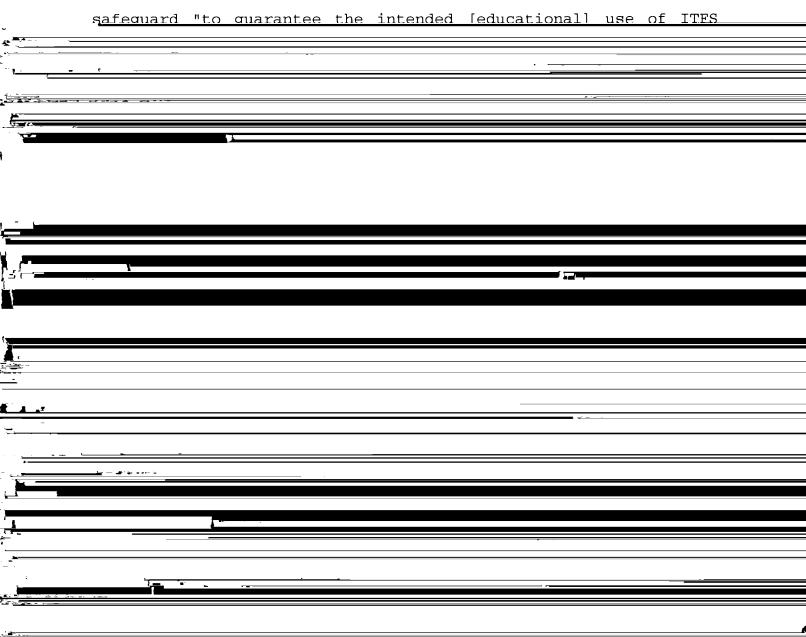
In this <u>Report and Order</u>, the Commission also permitted ITFS licensees to lease excess capacity on their existing channels. <u>Id.</u> at 1250. Although this amendment obviously benefitted the development of the wireless cable industry, the Commission also believed that the revenues generated from leasing would aid the financing, construction and operation of new ITFS facilities. The Commission noted that

"[0]ne of the most important purposes of this proceeding and rules development has been and continues to be the initiation of new service by qualifying parties whose need and/or abilities may not be represented by systems and operations in use and on file. Such applicants can be expected to use or lease excess capacity for non-ITFS uses to generate funds to initiate ITFS systems."

Instructional T.V. Fixed Service - Second Report and Order in MM

ITFS spectrum, while at the same time ensuring that ITFS entities retained sufficient control of their ITFS channels so that they could meet future educational programming needs.

The Commission has also shown its commitment to this primary purpose of ITFS in its adoption of minimum time requirements for educational programming on ITFS channels. When it initially approved excess-leasing in 1984, the Commission rejected minimum time requirements, expecting licensees to primarily utilize each of their ITFS channels for educational programming. However, the Commission later viewed minimum time requirements as a necessary safeguard "to guarantee the intended [educational] use of ITFS



"effort[s] to facilitate the expansion of wireless cable service as a competitive multichannel source of programming in no way reflects any diminishing Commission commitment to the further development of ITFS. [The Commission] continue[s] to believe that ITFS is a vital part of this country's educational landscape, and...anticipate[s] that ITFS will take on increasing importance as new technology is introduced...."

Further, the Commission emphasized that excess capacity usage is ancillary to the primary purpose and establishment of the ITFS spectrum. Id. at 6416. The Commission reiterated its commitment to the reservation of the radio spectrum for educational programming, pointing out that the ITFS spectrum was established for the transmission of educational materials, not as a source of financial support for educational systems. Id.

In 1991, the Commission again modified the time-use requirements to strike "the appropriate balance between [the Commission's] interest in promoting alternative uses of excess ITFS spectrum, on the one hand, and [its] interest in ensuring that ITFS entities retain the right to fully exploit their ITFS channels on the other." Wireless Cable Order Recon., 6 F.C.C. Rcd 6764, 6774 (1991). Although the Commission agreed to modify certain aspects of the minimum time requirements and "ready recapture" provisions

over the ITFS spectrum to meet future educational programming needs. Id.

In this <u>Reconsideration</u>, the Commission also authorized the use of channel mapping in order to respond to the technological advances occurring in the medium. <u>Id.</u> Since channel mapping technology allowed the Commission to maintain its leasing restrictions and at the same time respond to the wireless cable industry's need for full-time use of the same channels, the Commission felt that channel mapping was an effective way in which it could both safeguard the primary purpose of ITFS and promote the development of the wireless cable industry. <u>Id.</u>

III. PROPOSED RULE MAKING

As is evidenced by the <u>Reports and Orders</u>, the Commission has always viewed the public policy interest in reserving the ITFS spectrum as an educational medium as paramount. Although it recognizes the public policy interest in developing the wireless cable industry and in utilizing the full ITFS spectrum, it continues to view its primary purpose as helping educators further develop and utilize the ITFS spectrum for the transmission of educational materials. The Commission has adopted a flexible approach in its attempt to balance these competing interests, modifying the Rules governing ITFS as needed to meet the demands of both ITFS licensees and the wireless cable industry, as well as to

respond to the changing technology in the medium. The Board of Education believes a similar approach should be taken here.

The Board of Education recognizes the benefit that ITFS licensees have incurred through the growth of the wireless cable industry and the greater utilization of the ITFS spectrum, particularly those obtained with the allowance of excess capacity leasing. It sees the Commission's proposal to authorize the use of channel loading by ITFS licensees, allowing licensees to transmit all required programming on one channel for receipt on that channel, as the next step in a logical progression the Commission has made in its attempts to balance the competing interests of ITFS licensees and the wireless cable industry. It agrees with the proposed changes, but believes that the Commission must also reiterate its commitment to the primary purpose of the ITFS spectrum as an educational medium.

The Board of Education agrees that, since the Commission has already authorized the use of channel mapping by ITFS licensees, there is no reason for the reality of the use of the channels to be different from their appearance. It agrees that, just as excess capacity leasing generated funds that allowed for the development of additional ITFS stations, the savings incurred by removing the need for costly channel mapping equipment could also be utilized for the additional development of the ITFS spectrum by educational institutions.

The Board of Education agrees that this change should be authorized on a temporary basis because of rapid technology

improvements in the medium. It agrees that the development of digital compression could radically change the wireless cable industry and perhaps alleviate the need for channel mapping or channel loading altogether. Since it is not certain when digital compression will be a viable alternative for ITFS licensees, the temporary period that the Commission is recommending appears to be an appropriate solution.

Further, the Board of Education believes that a flexible approach is the key to the success of this change. Although it recognizes the benefits that can be obtained through both channel mapping and advancing technology, it also sees the need for continual monitoring by the Commission to ensure that these changes do not adversely impact the primary purpose of the ITFS spectrum. It believes that an approach similar to that taken by the Commission in its adoption of minimum time requirements is appropriate here. Such an approach would effectively balance the competing interests of ITFS and the wireless cable industry.

Further it believes that, just as it has done in its previous Reports and Orders, the Commission should reiterate its commitment to the primary purpose of ITFS as an educational spectrum. It believes it is important for the Commission to emphasize again the ancillary nature of excess capacity leasing and the development of the wireless cable industry. The Commission should again make clear that the primary purpose of changes to the rules governing ITFS is to aid the development and utilization of the ITFS spectrum for the transmission of educational materials.

In 1990, the Commission stated that it continued "to believe that ITFS [wa]s a vital part of this country's educational landscape, and...anticipate[d] that ITFS w[ould] take on increasing importance as new technology [wa]s introduced...." Report and Order (Wireless Cable Order), 5 F.C.C. Rcd 6410, 6411 (1990). The Commission should recognize the increasing validity of this statement today in light of the continued development and growth of the ITFS spectrum.

IV. CONCLUSION

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The Board of Education recognizes the obvious practicality in amending the FCC Rules to allow for channel loading. It agrees that this is simply bringing the reality of what is happening now on the ITFS spectrum in line with its appearance. However, it believes that, as was the case with all prior changes to the Rules governing ITFS, this change must remain ancillary to the primary purpose of ITFS; it believes that the Commission must continue to focus its efforts on the development of a spectrum dedicated to the transmission of educational materials.

As the experience of the Board of Education and other school systems like it throughout the country demonstrate, ITFS can be an extremely effective educational source. The Commission was farsighted when it established the ITFS spectrum in 1963; it must continue to look to the future, recognizing the tremendous growth and potential that is still available to educational institutions

desiring to utilize the ITFS spectrum. While it obviously must continue to balance the needs of changing technology and the growing wireless cable industry with the primary purpose of ITFS, the Commission must also continue to ensure that ITFS licensees retain the control necessary over the ITFS spectrum to meet their future educational programming needs.

Respectfully Submitted,

THE BOARD OF EDUCATION OF THE TOWNSHIP OF UNION, UNION, NEW JERSEY

y: Cuch

Baker & McKenzie 815 Connecticut Ave., N.W. Washington, D.C. 20006 (202) 452-7000

Its Attorneys

June 14, 1993

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